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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,098	12/21/2005	George Henry Platt Brown	UDL1P017/RMV/jwa/P400715U	9493
28875	7590	03/23/2006	EXAMINER	
Zilka-Kotab, PC P.O. BOX 721120 SAN JOSE, CA 95172-1120			NGUYEN, CHAU N	
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/522,098	Applicant(s) BROWN ET AL.	
	Examiner Chau N. Nguyen	Art Unit 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-43 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 28-43 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/24& 12/23/05</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the feature of the first signal transmission portion including 18 said first signal transmitting members arranged in 5 rows having 2, 4, 5, 4 and 3 signal transmitting members respectively as recited in claim 30, feature of the first signal transmission portion including 24 said first signal transmitting members arranged in 5 rows having 4, 5, 6, 5 and 4 signal transmitting members respectively as recited in claim 31, feature of a third signal transmitting portion comprising a plurality of elongate, flexible third signal transmitting members arranged outwardly of the second signal transmitting portion as recited in claim 34, feature of the outer surface being provided with ribs as recited in claim 37, and feature of an outermost layer having an inner periphery longer than the outer periphery of the layer adjacent thereto as recited in claim 40, must be shown or the feature(s) canceled from the claim(s).

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any

amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant’s use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no

text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 40 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not describe in detail to enable one skilled in the art to understand the claimed subject matter of the cable comprising "an outermost layer having an inner periphery longer than the outer periphery of the layer adjacent thereto" as recited in claim 40.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 28-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 28, line 4, after "members" insert --of the first signal transmitting members--.

Claim 28, line 7, change "a row" to --each said row--.

Claim 40, lines 1-2, the recitation of "an outermost layer having an inner periphery longer than the outer periphery of the layer adjacent thereto" is unclear and causes confusion.

Claims 29-39 are included in this rejection because of dependency.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 28, 32, 36, 40 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Sano et al. (5,109,456).

Sano et al. discloses, Figure 4, a signal transmitting cable comprising a first signal transmitting portion including a plurality of elongate, flexible first signal transmitting members, wherein the first signal transmitting members are surrounded by a first layer of resin material (25) curable by means of radiation such that only the outermost signal transmitting members of the first signal transmitting members are in contact with said first layer, and said first signal transmitting members are arranged to form at least three rows, wherein for each

said row containing a plurality of said members, said members are arranged such that neighbouring members of a row are in touching contact with each other, each recess formed by neighbouring members of a first said row facing towards a second said row accommodates a respective member of said second row, and said first layer is in touching contact with substantially all of the outward facing surface of the first signal transmitting portion (re claim 28). Sano et al. also discloses the first layer being formed of resin material cured by means of ultraviolet radiation (re claim 32), an outer surface of the cable being modified to facilitate installation into a duct by means of fluid flow (re claim 36), the outermost layer having an inner periphery longer than the outer periphery of the layer adjacent thereto (re claim 40), and claim 41 is a method counterpart of claim 28.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the

subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et al.

Sano et al. discloses the invention substantially as claimed except for the first transmitting portion including 12, 18 or 24 members arranged in 4 or 5 rows having 2, 3, 4 & 3, or 2, 4, 5, 4 & 3, or 4, 5, 6, 5 & 4. However, it would have been obvious to one skilled in the art to provide the first transmitting portion of Sano et al. with 12, 18 or 24 transmitting members arranged in 4 or 5 rows having 2, 3, 4 & 3, or 2, 4, 5, 4 & 3, or 4, 5, 6, 5 & 4 configuration to increase the transmission capacity of the cable since it has been held that merely duplicating the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

11. Claims 33-35, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et al. in view of Thompson (4,523,804).

Sano et al. discloses the invention substantially as claimed except for a second signal transmitting portion comprising a plurality of elongate, flexible second signal transmitting members arranged around the periphery of the first layer, wherein the external dimensions of said first layer are arranged such that each said second signal transmitting member is in touching contact with two adjacent said second signal transmitting members (re claims 33 & 42), a third signal transmitting portion comprising a plurality of elongate, flexible third signal transmitting members arranged outwardly of said second signal transmitting portion (re claim 34), and the second signal transmitting members being embedded in a second layer (re claims 35 & 43).

Thompson discloses a cable comprising a second transmitting portion comprising a plurality of elongate, flexible second transmitting members (22) arranged around the periphery of a first layer, wherein the external dimensions of said first layer are arranged such that each said second transmitting member is in touching contact with two adjacent said second transmitting members, a third transmitting portion comprising a plurality of elongate, flexible third transmitting

members (24) arranged outwardly of said second transmitting portion, and the second transmitting members being embedded in a second layer (26).

It would have been obvious to one skilled in the art to provide the cable of Sano et al. with a second signal transmitting portion comprising a plurality of elongate, flexible second signal transmitting members which are embedded in a second layer, arranged around the periphery of the first layer and arranged such that each said second signal transmitting member is in touching contact with two adjacent said second signal transmitting members as taught by Thompson to increase the transmitting capacity of the cable. It would have been obvious to one skilled in the art to provide the cable of Sano et al. with a third signal transmitting portion comprising a plurality of elongate, flexible third signal transmitting members arranged outwardly of the second signal transmitting portion as taught by Thompson to increase the transmitting capacity of the cable.

12. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et al. in view of Shoffner (4,892,442).

Claim 37 additionally recites the outer surface of the cable being provided with ribs. Shoffner discloses a jacket (10) provided with ribs (22) on the outer surface. It would have been obvious to one skilled in the art to provide ribs on the

outer surface of the Sano et al. cable to reduce friction between the cable and an adjacent object as taught by Shoffner.

13. Claims 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et al. in view of Davis et al. (6,801,696).

Claims 38 and 39 additionally recite the outer surface of the cable including at least one anti-static material or at least one friction reducing material.

Davis et al. discloses a cable in which the outer surface (12) including at least one anti-static material or at least one friction reducing material. It would have been obvious to one skilled in the art to provide the outer surface of the Sano et al. cable with at least one anti-static material or at least one friction reducing material to reduce the friction between the cable and conduit during installation as taught by Davis et al.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N. Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chau N Nguyen
Primary Examiner
Art Unit 2831